The following series of experiments had the, object; of lixing the increase of temperature, which molten pig iron undergoes during its change into steel. The tests were taken from the furnace with the test spoon, and poured into the water, the quantity of water employed amounting to nine litres. The weight of the metal poured in varied between 144 and 1(>G grammes. Two to three parallel experiments wore made for all determinations.

Gjirboii — Content of Mutal.	Tt-si, I.	Test, II.	Test III.	Moa n.
	((als.	Oils.	I'als.	('ills.
(a) 4'2S percent. Ladle I	270	27		27()-o
(b) 4-28 Ladle II .	2f>l	2rJ		252
(c) I) %44 from furnace . (d) 2-<>S	aiil!	2o 27	2(57	2(5!)
(e) 2*04	272	27	277	27*r>
(/) i-r>7	2S1	l'7	2s;{	2SO
</) <>'7tf	27!)	27S	27.^	277
A) O'UO	2iW	20S	2SS	2!)()
0 0-08 , ,,	2t)r>	21)1	2!)I	2!)2

The agreement is really good, if onci disrogards tho of the Test III., in series c and h. One sees also dourly tho growth of the heat content with diminishing carbon content. Between/and // there had boon made an addition of ore which has as a consequence the fall of tho heat content of tho HorioH //. Other tests which, during tho canting of tho iinishod ntoel in the moulds, were directly cast from tho casting hullo into the water buckets (in which caso tho quantities of water amounted to 89 litres) gavo roHiiltn an under :—

FIRST SKIUKH.

(Quantity of water employed Toinponituro at cud of oxporinu»nt Tomporaturo before the experiment:

Increase of temperature Quantity of metal unod Corresponding caln. per kg. ntool

Wahn1 Buck.-! I. Ul'l" (•. 19*2" C'.	W.t,r »,.,.» Mi) lit. .11 -0
Ill)1 (.'. :i()T|-9 ealn,	11-2' C i,-i:w K.